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**PATENT COOPERATION TREATY**  
**UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:  
International Patent Application No.:  
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Examiner:

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**RESPONSE TO INTERNATIONAL PRELIMINARY EXAMINATION**  
**AUTHORITY UNDER ARTICLE 34**

This response is filed in response to the First Written Opinion from the International Preliminary Examining Authority in the United States on the above-identified PCT application. The date of mailing by the International Preliminary Examining Authority was February 12, 2004. Reconsideration of this application is respectfully requested.

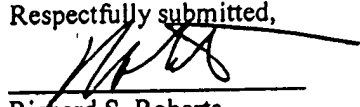
The positive comments regarding the novelty and inventive step of claims 1-36, 40-41, and 46 and industrial applicability of claims 1-46 are noted with appreciation.

In the First Written Opinion, under item 2, the Examiner has taken the position that the subject matter of claims 37-39 and 42-45 lack novelty and inventive step citing prior art document WO 01/86709. According to this amendment, Applicants have amended claim 39 to include the limitations of allowed claim 40. This effectively enters the limitations of allowed claim 40 into all claims depending from 39, including rejected claims 42-45. Claims 37, 38, and 40 have been cancelled. The claims have been renumbered accordingly such that:

Claim 39 is now named claim 37;  
Claim 41 is now named claim 38;  
Claim 42 is now named claim 39;  
Claim 43 is now named claim 40;  
Claim 44 is now named claim 41;  
Claim 45 is now named claim 42; and  
Claim 46 is now named claim 43.

All of the noted claim amendments have been made on the attached substitute pages 36 and 37.

It is respectfully asserted that the above rejections against claims 39 and 42-45 (now claims 37 and 39-42) have been overcome by the instant amendment. If any defects in the application remain, another opinion is respectfully requested.

Respectfully submitted,  
  
By: Richard S. Roberts  
Representative on Demand  
Date: March 10, 2004

31. The method of claim 1 wherein the composition further comprises a solvent having a boiling point ranging from about 50 to about 250 °C.

32. The method of claim 1 wherein the composition further comprises a solvent selected from the group consisting of hydrocarbons, esters, ethers, ketones, alcohols, amides and combinations thereof.

33. The method of claim 29 wherein the solvent is selected from the group consisting of di-n-butyl ether, anisole, acetone, 3-pentanone, 2-heptanone, ethyl acetate, n-propyl acetate, n-butyl acetate, 2-propanol, dimethyl acetamide, propylene glycol methyl ether acetate, and combinations thereof.

34. A nanoporous dielectric film produced on a substrate by the method of claim 1.

35. A semiconductor device comprising a nanoporous dielectric film of claim 34.

36. The semiconductor device of claim 35 that is an integrated circuit.

37. A composition comprising a silicon containing pre-polymer, a metal ion free catalyst, and a porogen that does not bond to the silicon containing pre-polymer and is selected from the group consisting of poly(alkylene) diether, a poly(arylene) diether, poly(cyclic glycol) diether, Crown ethers, polycaprolactone, fully end-capped polyalkylene oxides, fully end-capped polyarylene oxides, polynorbene, and combinations thereof.

38. The composition of claim 37 wherein said metal-ion-free catalyst is tetramethylammonium acetate.

39. The composition of claim 37 wherein said silicon containing pre-polymer comprises a combination of acetoxy-based leaving groups.

40. The composition of claim 39 wherein said combination of acetoxy-based leaving groups comprises tetraacetoxysilane and methyltriacetoxysilane.

41. A spin-on composition comprising said composition of claim 37.

42. A film comprising said spin-on composition of claim 41.

43. In a method of controlling the pore size of a porous silica film, comprising